

[0044] The graph of FIG. 3a can also be considered in a different way. For coins of the true denomination that corresponds to the normal acceptance window (NAW), the most likely value of parameter x_1 is the peak value x_p and the least likely value occurs at the upper and lower window limits w_1, w_2 . Whilst it is possible for an acceptable value x_f to occur close to one of the window limits w_1 , the probability distribution shown in FIG. 3a makes it clear that it is unlikely that many such values x_f ~~will~~ will occur for the true coin concerned. If several values x_f occur, this is more likely to indicate the presence of a fraudulent distribution 23 as shown in dotted outline, with a peak value ~~centred~~ centered on or around x_f . This property is used in accordance with the invention to discriminate between true coins and a set of frauds that have been manufactured to the same design, or foreign coins, which produce coin parameter values x_f lying within the normal acceptance window NAW. In accordance with the invention, the occurrence of more than one parameter value x_f is considered to be unusual and likely to represent the occurrence of a fraud. A restricted acceptance window RAW shown in FIG. 3a is used upon detection of such a situation, as will now be described.

[0071] Now, having inserted 5 true coins, the fraudster may decide to attempt another fraudulent coin. The fraudulent coin is inserted and the parameter $x_{sub.17}$ determined and sent to the processor at step S1. The IF statement of step S2 is false as $timer_secure \neq 0$ and so n_max and t_max remain at the increased values 7 and 36 respectively. The query of step S3 may return a negative response as ~~it~~ it could still be at $t > 0$, however, step S4 will now return a positive response because $n=0$. This results in a comparison of the fraudulent coin parameter x_{17} with the normal acceptance window. The parameter x_{17} , although coming from a fraudulent coin, could fall inside this window in which case it would be accepted at step S8. The parameter x_{17} is likely